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FOREWORD

THE need of a journal exclusively devoted to the results of research in the field of evolution has become increasingly acute. The scattering of the scientific output of evolutionists over a great multitude of journals has been a severe handicap to a field that has experienced a vigorous renaissance during recent years.

After the publication of Darwin's *Origin of Species* in 1859, the next decades were devoted to proving the fact of evolution. Complete unanimity had been reached by biologists by the end of the century and an ever-greater amount of work was devoted to the elucidation of the causes of evolution. Geneticists, taxonomists, and paleontologists went their own way in this endeavor, and at first they appeared to be getting farther and farther apart in their conclusions. Fortunately this condition, which characterized the early decades of this century, was only temporary. The deeper insight into the factors and processes of evolution gained through the accumulation of facts by representatives of the various fields clearly brought out that the differences of opinion were spurious. This coming together of evolutionists from all fields has initiated a new era in evolutionary research.

Basically there are two ways of looking at a biological structure, characterized by the questions: "How does it function?" (physiological approach) and "How did it get that way?" (historical approach). No biological phenomenon will be fully understood until both questions have been answered. It is the student of evolution who pursues the historical approach because he realizes that what exists today is the result of happenings in the past. Evolution is a problem of interaction: interaction of parts in the organism; interaction between individuals and populations; interaction between different species; and interaction of the organic world with the inorganic.

The study of evolution in this broad meaning is still in its infancy. Only a beginning has been made in the analysis of these interactions and in the establishment of the causal relationships.

The Society for the Study of Evolution was founded to further such research. The officers of the Society feel that one of the essential means to accomplish its aims is the establishment of a journal devoted to evolutionary research.

EVOLUTION will bring together contributions on evolutionary questions from all fields of biology. The work of specialists will thus be brought to the immediate attention of other evolutionists in different fields. The interchange of ideas facilitated by this medium of publication will help to eliminate the many misunderstandings between specialists in widely divergent fields. Contributions from all fields of biology are invited provided that the facts and conclusions presented are of prime interest to the student of evolution. Contributions will be accepted on the basis of merit regardless of the country of origin.

Publication of the new research journal would not be possible without a grant generously given by the American Philosophical Society, a contribution that is acknowledged with deep appreciation. It is now up to the students of evolution to make the new journal a success by submitting their research products and by gaining new readers for the journal.

THE EDITOR